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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,932	04/13/2004	Keiko Ishibashi	2004-111	4453

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PHILADELPHIA, PA 19103

EXAMINER

WEINSTEIN, STEVEN L

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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02/22/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/822,932

Applicant(s)

ISHIBASHI ET AL.

Examiner

Steven L. Weinstein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,8 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,8, and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 13 are rejected under 35USC112, 1st paragraph for containing New Matter and being non-enabling. Claim 12 recites that the cooked rice is stored in freezing temperatures for at least 4 days and low temperature refrigeration for at least 4 days and claim 13 recites 6 days and 4 days respectively. The specification is not seen to necessarily and inherently support these recitations and applicants have not shown any support for these recitations as well. Also, as recited, the claims are silent as to when the additives were added and the concentrations of the additives. As disclosed, the additives are added before cooking and the additives are present in effective amounts which, taken together, present a composition effective to produce a cooked rice with the comparative properties recited. As noted previously, the "wherein" clause is not seen to provide concentrations or ranges which would produce the result recited. Such language as in amounts or concentrations sufficient to... or effective to... or effective amounts to... would obviate this part of the 35USC112 rejection. It is also noted that it would appear that the attempted comparison should make reference to rice that does not have the recited additives.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7,8 and 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The comparisons in the "wherein" clauses are confusing and thus indefinite. It is not clear what is being compared. The first phrase in each of the claims recites "the cooked rice when consumed upon completion of cooking", but the second phrasing "the cooked rice when consumed after being stored in low temperature..." is also consumed after "completion of cooking". If the intent was to recite that the cooked rice in the first phrasing is consumed immediately upon completion of cooking, without cooling or storage time, the claims do not recite this concept.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7,8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamoto ('042) in view of Embuscado et al (2002/0004093) and Food Hydrocolloids (Nishinari et al 1993) further in view of Takami et al ('462), Kozai et al(JP 2001-17099), Kishida et al (JP 9-163943), Numata et al (JP2000-166491), Takami et al (JP 9-322725), applicants admission of the prior art and Nakamura et al (6045847), further in view of Monte (3,914,524), Gebert et al (6,063,402), and Morningstar (3,294,523).

Claims 7 and 8, newly amended, and new claims 10-13, recite cooked rice containing soybean polysaccharide, erythritol, and amylase, and then attempt to recite how the rice differs in properties.

As noted previously, the art taken as a whole is replete with teachings of various additives and techniques to provide a cooked rice that has a good ability to be stored refrigerated or frozen and yet maintain the properties which are present just after cooking. That is, applicants' problem was known in the art, and, indeed, all of the recited additives were known in the art to improve the properties of refrigerated cooked rice. The previous rejection relied on the fact that trehalose was a sugar alcohol or polyol, because several of the cited references considered trehalose to be a sugar alcohol or polyol. The amendment urges that this is not accurate, and several texts appear to support the fact that trehalose is not a sugar alcohol or polyol, but is a (di)saccharide. In any case, as noted previously, the art taken as a whole discloses it is notoriously conventional that the cold properties of cooked rice can be improved by adding an enzyme, such as the recited amylase which promotes gelation and swelling of starch particles, which contributes to an increase in the amount of water incorporated into the cooked rice (e.g., Iwamoto). The art taken as a whole (e.g., Iwamoto), also discloses it was notoriously conventional to also include common additives known for their water absorbing properties, such as soybean polysaccharides, to also increase the water absorbed by the rice. Finally, the art taken as a whole (e.g., Iwamoto) also discloses it was also known to additionally include compounds which fix the water that is absorbed by the water absorbing compounds. Iwamoto discloses that trehalose is such a

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compound. The art taken as a whole discloses these water absorbing and water fixing compounds can be starches, polysaccharides, sugars, and sugar alcohols. Thus, the preponderance of the art teaches that cooked rice can have better refrigerated storage properties by absorbing more water during cooking and fixing this water. Embuscado et al discloses that compounds which fix (or trap or retain) water, so that the products have a reduced rate of becoming stale or dry, are called humectants, and that these compounds include carbohydrate humectants such as glycerol, propylene glycol, fructose, sucrose, dextrose and other polyols. Embuscado et al discloses that erythritol causes a synergistic increase in the humectant properties of humectants. Since the art taken as a whole discloses that, when producing a more storage stable refrigerated, cooked rice, it is important to include additives which absorb and fix additional water, to add erythritol (or indeed, any polyol or erythritol in combination with other polyols) to enhance the fixing of the water would therefore have been obvious in view of the art taken as a whole. Note that the claims do not exclude additional ingredients. It would therefore have been expected that substances which have more enhanced fixing capability would result in a more enhanced result. As noted previously, given that all of the ingredients are known, including how they function, and what is necessary in terms of properties to produce a more stable cooked rice, the particular compounds associated with each other are seen to have been an obvious matter of optimization, obviously and routinely determinable. Katsuta et al, newly relied upon, is further evidence that not only were sugar alcohols known to be used in improving the cold storage properties of cooked rice, they were broadly known to impede starch

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retrogradation, the cause of cold storage impairment of cooked rice. It is also noted that applicants' specification discloses that any sugar alcohol can be used, and although erythritol is preferred, no claim is made that erythritol works much better than the other conventional sugar alcohols. If anything then, if applicants' results are accurate one can surmise that sugar alcohols fix water better than trehalose which is something that would be known or routinely determinable. Finally, it is also noted that applicant discloses that additional additives could be added to the cooked rice such as saccharides, gums, etc., which the art teaches are known compounds in associating water with cooked rice for cold storage. The remainder of the references are applied for the reasons given previously.

All of applicants' remarks have been fully and carefully considered but are considered to have either been addressed above, or are considered moot in view of the new ground of rejection. It is noted that although the comparative data found in the specification is not considered to be sufficient to overcome the prima facie case of obviousness for the reasons noted previously, the results, if accurate, are considered to be a routine optimization and not unexpected in view of the art taken as a whole.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven L. Weinstein whose telephone number is 571-272-1410. The examiner can normally be reached on Monday-Friday 7:00 A.M.-2:30 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steve Weinstein
STEVE WEINSTEIN
PRIMARY EXAMINER 1794
2/19/08